

10 Rec

22 JUL 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
31 July 2003 (31.07.2003)

PCT

(10) International Publication Number  
WO 03/062615 A1(51) International Patent Classification<sup>7</sup>: F02B 75/34,  
F01L 7/04Trevor [GB/GB]; Poole House, 21 Thames Street, Poole,  
Dorset BH15 1JN (GB).

(21) International Application Number: PCT/GB03/00168

(74) Agent: BARKER BRETTELL; Medina Chambers, Town  
Quay, Southampton SO14 2AQ (GB).

(22) International Filing Date: 20 January 2003 (20.01.2003)

(25) Filing Language: English

(26) Publication Language: English

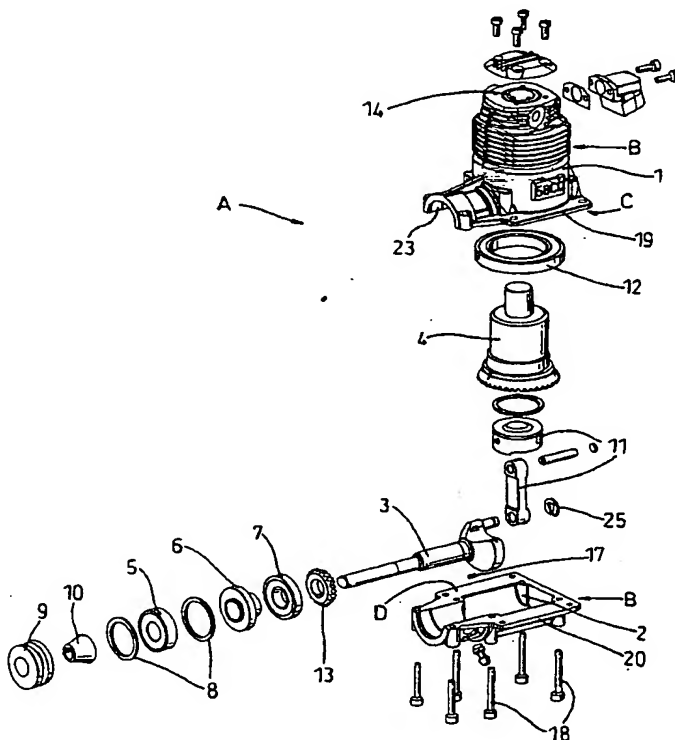
(30) Priority Data:  
0201592.3 24 January 2002 (24.01.2002) GB(71) Applicant (for all designated States except US): RCV EN-  
GINES LIMITED [GB/GB]; 6 Haviland Road, Ferndown  
Industrial Estate, Wimborne BH21 7RF (GB).(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,

(72) Inventor; and

(75) Inventor/Applicant (for US only): LAWES, Keith,

[Continued on next page]

(54) Title: ENGINE AND CRANK HOUSING



(57) Abstract: A housing assembly (B) for a rotating cylinder valve engine (A) comprising a rotary cylinder (4) and a crank assembly, comprises a first casing part (1) and a second casing part (2) each formed with a respective jointing face (C, D), the first casing part (1) being formed with a tubular bore adapted to receive the rotary cylinder (4) and being formed to partially house the crank assembly and the second casing part (2) being formed to partially house the crank assembly. The housing assembly (B) further comprises a tubular portion for housing bearing means (5, 7) for the crankshaft assembly, the tubular portion being defined by a semi-cylindrical section formed on the first casing part (1) and a semi-cylindrical section formed on the second casing part (2). The arrangement is such that in the assembled state the respective jointing faces (C, D) are in contact with each other, apart from any gasket therebetween, the plane of the jointing faces (C, D) being substantially perpendicular to the axis of rotation of the rotary cylinder (4), the tubular portion locating and retaining the bearing means (5, 7) for the crankshaft assembly.

WO 03/062615 A1

Best Available Copy